

Determination of copper in...

S/032/62/028/010/001/009  
B117/B186

quantities of  $1 \cdot 10^{-5}\%$  with a root mean square deviation of 11%. The presence of iron in an excess of up to 1000 times does not interfere with the determination of copper while molybdenum and an excess of bismuth weighing 20 to 30 times as much as the copper do so. There are 2 figures and 2 tables.

ASSOCIATION: Gosudarstvennyy nauchno-issledovatel'skiy i proyektnyy institut redkometallicheskey promyshlennosti (State Design and Planning Scientific Research Institute of the Rare Metals Industry)

Card 2/2

S/032/62/028/012/001/023  
B124/B101

AUTHORS: Kaplan, B. Ya., and Sorokovskaya, I. A.

TITLE: Determination of europium oxide in oxides of rare earths by square-wave polarography

PERIODICAL: Zavodskaya laboratoriya, v. 28, no. 12, 1962, 1424 - 1427

TEXT: In accordance with Vlček's data (Chem. listy, 49, 565 (1955)) it was found that in slightly acid chloride solutions, europium yields none of those reversible reduction peaks that occur in slightly acid, weak-alkaline and neutral Trilon B solutions. Thus the potential of the peak in a solution containing 2% Trilon, 2% borax, 6% sodium chloride, and 2% sodium sulfate is -1.04 v, whereas in solutions containing 1.5%  $\text{NaH}_2\text{PO}_4$ , 1.5% Trilon, 16%  $\text{NaCl}$ , and 1.5%  $\text{Na}_2\text{SO}_4$ , it is -1.20 v. The peak of europium in Trilon solutions can easily be eliminated by an addition of gelatine. In a 10% Trilon solution containing 15%  $\text{NaCl}$ , europium is reduced reversibly at pH = 8 - 10, and the height of its peak is independent of the pH value. It is not expedient to add a buffer, but much better to neutralize

Card 1/3

Determination of europium ...

S/052/62/028/012/001/023  
B124/B101

the slightly acid Trilon solution with a base using phenolphthalein as indicator. Lead producing a peak equivalent to 0.3 - 0.5  $\mu$ g europium disturbs the determination. Such disturbances due to the lead impurities occurring in all rare earths and their compounds can be eliminated by unithiol additions which, in excessive quantities, shift the europium peak to -0.54 v. Hence the peak can thus be determined only with a minimum of 15-17 mg/l, i.e. some tenths of one cent. The correction for lead can be calculated by the multiple addition method and this may also be used to determine the dependence of the height of the europium on the content of rare earths. At 20, 14, and 10 g samarium oxide per liter, the increase in europium peak is 20, 37, and 45 mm respectively, if the increase in europium concentration is 1 mg/l. If the samarium oxide concentration is increased from 10 to 20 g/l, the decrease in europium peak is 53%. The same increase in the concentration of a mixture containing 83% neodymium oxide and 10% samarium oxide causes a 17% reduction in peak height. The sensitivity of the europium oxide determination is 0.003% in samarium oxide and 0.001 - 0.002% in neodymium oxide. There are 1 figure and 2 tables.

Card 2/3

S/032/63/029/004/001/016  
A004/A127

AUTHORS: Kaplan, B.Ya., Sorokovskaya, I.A.

TITLE: Determination of tungsten in ammonium perrhenate by the method of squarewave polarography

PERIODICAL: Zavodskaya laboratoriya, no. 4, 1963, 391 - 392

TEXT: The sensitivity of the colorimetric method of determining tungsten in rhenium products not being sufficiently high, the authors suggest determining tungsten in ammonium perrhenate by the method of square-wave polarography on a 6 n HCL background. They give an account of the disturbing influences of accompanying elements and point out that, with a weighed portion 0.2 g, the sensitivity of the method attains  $1 \cdot 10^{-4}\%$ . The root mean square deviation of the results does not exceed 26%. A description of the analysis process is given, as well as the formula for establishing the tungsten content, viz.  $C = \frac{aB_1}{H [B_2(5 + \Delta V)/V - B_1]} \cdot 10^{-4}\%$ , where  $a$  - tungsten addition in microgram,  $H$  - weighed portion in g,  $V$  - addition volume in ml,

Card 1/2

Determination of tungsten in ...

S/032/63/029/004/001/016  
A004/A127

B<sub>1</sub> and B<sub>2</sub> - height of peak of the solution to be analyzed and solution with addition respectively. There are 2 figures.

ASSOCIATION: Gosudarstvenny nauchno-issledovatel'skiy i proyektnyy institut redkometallicheskoj promyshlennosti (State Scientific-Research Design and Planning Institute for the Rare Metals Industry)

Card 2/2

S/032/63/029/001/004/022  
B101/B186

AUTHORS: Kaplan, B. Ya., and Ol'shevskaya, I. V.

TITLE: Determination of scandium in coal ashes after paper chromatographic separation

PERIODICAL: Zavodskaya laboratoriya, v. 29, no. 1, 1963, 26 - 27

TEXT: The coal ash is dissolved in  $H_2SO_4 + HF$  and the insoluble part is decomposed by potassium pyrosulfate. Fe, Sc, and the yttrium serving as chromatographic carrier (added as  $YCl_3$ ) are precipitated as tartrates, calcined, and dissolved in HCl, whereupon the Sc is separated by paper chromatography. The spots of Sc in the chromatogram are dissolved in HCl and the Sc is determined by spectrophotometry at 530 mμ after addition of alizarin S, or by colorimetry. The calibration curve is linear in the range of 10-100 mg  $Sc_2O_3$  per 25 ml. Iron does not interfere in concentrations of up to 400 mg per 100 ml. The interfering Al is removed as sodium aluminate. The method suggested permits of determining 0.005 %  $Sc_2O_3$ . The results show good agreement with those from the spectrum analysis.

Card 1/2

Determination of scandium in coal ...

S/032/63/029/001/004/022  
B101/B186

There is 1 table.

ASSOCIATION: Tsentral'naya khimicheskaya laboratoriya geologicheskogo  
upravleniya tsentral'nykh rayonov (Central Chemical  
Laboratory of the Geological Administration of the Central  
Regions)

Card 2/2

KAPLAN, B.Ya.; REVIYAKINA, G.N.

Oxidizing-alkaline solution of niobium, tantalum, and their alloys  
for the determination of their nitrogen content. Zav.lab. 29 no.12:  
1427-1428 63. (MIRA 17:1)

1. Gosudarstvennyy nauchno-issledovatel'skiy i proyektnyy institut  
redkometallicheskey promyshlennosti.



ACCESSION NR: AP4039250

S/0032/64/030/006/0659/0661

AUTHORS: Kaplan, B. Ya.; Sorokovskaya, I. A.; Shirayeva, O. A.

TITLE: Pulse polarograph determination of tellurium traces in metallic antimony, indium, gallium, and bismuth

SOURCE: Zavodskaya laboratoriya, v. 30, no. 6, 1964, 659-661

TOPIC TAGS: tellurium, antimony, indium, gallium, bismuth, polarographic analysis, vector polarograph TsLA, Mervin Harwell polarograph

ABSTRACT: A new procedure based on the square-pulse polarographic analysis was developed for tellurium determination in pure metals. Antimony, indium, gallium, and bismuth were dissolved in a weakly acid potassium chloride solution. Tellurium was reduced to the elementary state by the hydrochloride of hydroxylamine and thio-sulfate and then co-precipitated with sulfur (sulfur was chosen because it formed no electroactive substances). Unlike the usual polarographic waves, the pulse-polarographic peaks of acid solutions were proportional to tellurite concentrations. This fact was explained by the different types of the reversibility in the processes taking place during the cathode reduction of elementary tellurium and hydrogen. It

Card 1/3

ACCESSION NR: AP4039250

was required to obtain those conditions under which the slope of the tellurium peaks would be minimal. This requirement was satisfied when a potassium chloride solution with pH = 1.5 - 2.5 was used (it was later proved that analogous tellurium peaks may be obtained with pH = 2-3). The polarograms were registered by a Mervin-Harwell or a vector TsLA polarograph. High acidity of the tellurium solution helped to prevent the pollution of residue with bismuth, antimony, arsenic, and other elements. It was established that copper, bismuth, antimony, arsenic, gold, selenium, and other elements produced no significant effects if their contents varied from 0.1 to 1.2%. Tellurium determination was made without a preliminary separation of these elements (except for arsenic and selenium, which affected the height of the peak). A small systematic loss of tellurium occurred during the transfer of the analyzed sample to the solution for polarographic determinations. This error was eliminated by introducing additional tellurium into the primary solutions. The accuracy of this method was approximately  $2 \cdot 10^{-5}\%$ . Orig. art. has: 1 table and 2 figures.

ASSOCIATION: Gosudarstvennyy nauchno-issledovatel'skiy i proyektnyy institut redkometallicheskoj promyshlennosti (State Scientific Research and Design Institute of Rare Metal Industry)

Cord 2/3

ACCESSION NR: APL039250

SUBMITTED: 00

DATE ACQ: 18Jun64

SUB CODE: MM,OC

NO REF SOV: 005

ENCL: 00

OTHER: 000

Card 3/3

KAPLAN, B.Ya.; SOROKOVSKAYA, I.A.

Pulsed polarographic determination of selenium traces in metallic  
Sb, In, Ga, and Bi. Zav, lab. 30 no.7:783-786 '64.

(MIRA 18:3)

1. Gosudarstvennyy nauchno-issledovatel'skiy i proyektnyy institut  
redkometallicheskoj promyshlennosti.

KAPLAN, B.Ya.; SOROKOVSKAYA, I.A.

Possibilities of amalgam square-wave polarography with storage.  
Zav. lab. 30 no.10:1177-1180 '64. (MIRA 18:4)

1. Gosudarstvennyy nauchno-issledovatel'skiy i proyektnyy institut  
redkometallicheskoj promyshlennosti.

L 12035-66 EWT(m)/EWP(t)/EWP(b) LJP(c) JD  
 ACC NRT: AP5024141 SOURCE CODE: UR/0075/65/020/009/0927/0933

2/  
 30

AUTHOR: Kaplan, B. Ya.; Sorokovskaya, I. A.; Shirayeva, O. A.

ORG: State Scientific-Research and Design Institute of Rare-Metal Industry, Moscow.  
 (Gosudarstvennyy nauchno-issledovatel'skiy i proyektnyy institut reko-metallicheskey promyshlennosti)

TITLE: Pulsepolarographic method of solution analysis at elevated temperatures

SOURCE: Zhurnal analiticheskoy khimii, v. 20, no. 9, 1965, 927-933

TOPIC TAGS: polarographic analysis, trace analysis, zinc, gallium-compound, indium-compound, titanium, columbium, tantalum

ABSTRACT: A pulse-polarographic method has been developed for determining zinc in gallium, antimony, and indium antimonide (after extraction of zinc thiocyanate) in a hot 1 N solution of  $\text{NH}_4\text{Cl}$ . Dissolve 0.5 g of metal or intermetallide in quartz crucible by adding 5 ml  $\text{HNO}_3$  and 1 ml  $\text{HCl}$ , evaporate solution to dryness, dissolve residue in 5 ml  $\text{HCl}$  (1:1), and transfer into a separatory funnel using 25 ml 10% solution of  $\text{NH}_4\text{SCN}$  in 1N  $\text{HCl}$ . Extract zinc with 25 ml isomyl alcohol, wash extract with a solution of  $\text{NH}_4\text{SCN}$  acidified with  $\text{HCl}$ , re-extract zinc twice in 5-ml

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UDC: 543.253

L 12035-66

ACC NR: AP5024141

portions of  $1M\ Na_2Cl - 1M\ Na_2O_4$ . In analyses of indium or indium antimonide, <sup>1</sup> centrifuge out the indium hydroxide from the re-extraction after heating briefly. Decant solution into a quartz crucible and add to the transparent re-extract 0.05ml saturated solution of KCl and 5 ml.  $HNO_3$ . After 20-40 minutes (to allow for liberation of N oxides), evaporate solution to dryness with slow heating. The ammonium salts are driven off first in a sand bath and then in the muffle furnace (3 minutes at 350-400 C). Dissolve the dry residue in few ml  $IN\ NH_4Cl$ , transfer to quartz electrolyzer with water jacket (water temperature in thermostat 85-90C). After passing a current of nitrogen through the solution, use the polarograph with in the range from -1.3 to -0.8 v, and determine the zinc by the method of additions, taking into account the results of the blank run. The pulse polarographic method has also been developed for determining titanium in niobium, tantalum, and their pentoxides, without separation of bases in hot sulfuric-oxalic acid solutions. The sensitivity of determination is  $n \times 10^{-4}\%$ . Orig. art. has: 4 figures and 3 tables.

SUB CODE: 07/ SUBM DATE: 11May64/ ORIG. REF: 006/ OTH. REF: 009

2/2

CC

ACT-1/OWP(t)/OWP(h) IJP(c) RDH/JD

1. *diethylthiocarbamate, polarographic determination of tellurium*

diethylthiocarbamate, polarographic determination of tellurium, *Journal of Analytical Chemistry*, 1962, No. 17, p. 102.

REF. A.T. The method of diethyldithiocarbamate extraction described by V. B. *Journal of Analytical Chemistry*, 1962, No. 17, p. 102, Moskovskiy dom nauchno-tekhnicheskoy *propagandy*, 1962) was simplified by eliminating the addition of potassium cyanide in determining the tellurium content by the pulse-polarographic method. With a 1-gram dispersion containing  $1 \cdot 10^{-2}$  g Te, the analytical results had a variation coefficient of 27 and a systematic undervalue of 27%. The 1-gram dispersion was dissolved in a (4:1) solution of nitric and hydrochloric acids, evaporated, and redissolved in 10 ml of hydrochloric acid (after removing the nitrates with formic

Cord 1/2





$$E_n = E_{NP} + E_{WP}(b) + E_{FP}$$

32

Maclan, O. Ya.; Shiryayeva, . A.

11. Pulse polarographic determination of thallium in natural iodine

avodskaya laboratoriya, v. 31, no. 6, 1958, p. 18-21.

4.5. Impurity content, indium, polarographic analysis and detection, sensitivity increase /Marvin Carver and J. W. Smith, Jr. and J. B. ...  
polarographic polarograph 11

graphical polarograph

Two pulse polarographic methods for determining small percentages of metallic iodine were developed to overcome the difficulties of the previous method, associated with the weakness of the final

...of the previous method, associated with the presence of the  
lithium peak by peaks of other elements, were eliminated. The determination of  $10^{-4}\%$   
thallium in indium is possible in an ammonium-Trilon base electrolyte without



indium wave was a "pre-wave," not the basic wave. Study of the anode peak gave an indication of the kinetic character of the pre-wave, but the mechanism for pre-wave generation is not understood. The ethereal extraction is sufficiently selective for only lead, and this can be used for the separation of lead from indium.

AP 5014488

For 0.5 micrograms of thallium added to 1 g of indium in an HCl solution, the current is  $1.5 \cdot 10^{-5}$  A. Orig. art. has 1 fig.

№ Gosudarstvennyy nauchno-issledovatel'skiy tsentr khimicheskoy promyshlennosti (State Scientific Center of Chemical Industry)

AV: 00

ENCL: 00

PR: 00, 00

AV: 003

OTHER: 002

USSR.

Petrography of the dolomites of the Bakhmut syncline.  
 A. V. Logvinenko and B. Ya. Kaplan. *Doklady Akad. Nauk S.S.S.R.* 90, 207-210 (1953). The dolomite limestone  
 sediments of the syncline of Bakhmut (Ukraine) are Lower  
 Permian; they are derived from shallow water lagoons and  
 bays which had only a restricted connection with the open  
 ocean; at times they have been entirely sepd. from it, and  
 formed characteristic carbonate and sulfate sediments (lenses  
 and banks of gypsum and anhydrite in the sandy and dol-  
 omite limestone formations). The dolomites are usually  
 highly porous (15 to 19%), often typically developed with  
 oolites, brecciated, and distinctly secondary by replacement  
 reactions of primary  $\text{CaCO}_3$  organogenic sediments. These  
 primary formations are derived from algae-rich bottom  
 sediments of the lagoons, and show in their fossils  
 (Ootonia, Ootonia) a remarkable similarity with corre-  
 sponding sediments of Kansas (cf. Johnson, *Bull. Geol. Soc.*  
*Amer.* 57, No. 12, 1(1946)). The clayey and hydromica-  
 feldspar minerals are typically terrigenous and accessories  
 in the sediments. Pyrite is locally assoc. with org. relicts.  
 9 chem. analyses are given. W. Eitel

KAPLAN, B. YA.

AUTHOR: Kaplan, B. Ya.

20-4-39/52

TITLE: On the Conditions of Formation of the Lime-Dolomite Mass ( $P_1^C$ ) of the Bakhmut-Depression (Ob usloviyakh obrazovaniya izvestnyakovo-dolomitovoy tolshchi ( $P_1^C$ ) Bakhmutskoy kotloviny).

PERIODICAL: Doklady AN SSSR, 1957, Vol. 117, Nr 4, pp. 682-685 (USSR)

ABSTRACT: The said mass of the Donetsk basin belongs to the Lower Perm and is opposed to the Schwagerinen-horizon of the Russian plateau by most of the researchers. The following facies were separated by the author as result of a lithological study of the said mass (table 1): Lagoon-facies.  
1) Facies of movable coastal-lagoon-shallow-water characterized by dolomites interspersed with brecciae, fine- and coarse grained sandstones with inclusions of carbonate gravel and with pseudo-brecciae. These rocks were formed in immediate vicinity of the continent. The erosion was local and of short period, whereupon the bottom of the lagoon was drained. This facies is only local and developed in the North and North-East of the Bakhmut-depression. Its sediments are found in the middle part of the mass concerned with.

Card 1/5

On the Conditions of Formation of the Lime-Dolomite  
Mass (P<sub>1</sub>) of the Bakhmut-Depression

20-4-39/52

2) Inshore lagoon-facies with phytogenic dolomites (oncolites) and with oolith and oolith algae-carrying dolomites, and sand dolomites, aleurolithes and fine grained sandstones associated with. The high degree of dolomitization (95 to 98 %) and the low share of terrigen admixtures (1 to 2 %) proves an almost lacking water discharge from the continent during the formation of algae-carrying dolomites. Sometimes the fresh water discharge increased. Then, the salt-content of the lagoon decreased and more clastic substances were carried in. Sandstone dolomites were deposited within these periods. This facies is widely spread in various parts of the Bakhmut depression and in several stratigraphic horizons.

3) Facies of the central part of the lagoon. Here micro-grained sedimentation-dolomites, gypsum- and anhydrite stones, dolomitic marl, non-stratified loams, argyllites, and argyllite-aleurolithes occur. Both gypsum and dolomites were formed on account of the metamorphism of sea water which penetrated the lagoon through narrow seas (in the West at Kramatorsk and in the North-East at Dronovka). Its salt-content increased gradually until concentrations were attained which enable both

Card 2/5



On the Conditions of Formation of the Lime-Dolomite  
Mass (P<sub>1</sub><sup>o</sup>) of the Bakhmut-Depression

20-4-39/52

both the dolomite and subsequently the gypsum-sedimentation. The facies-conditions correspond here to the central part of the lagoon which is most far distanced from the shore. Here the chemogenous process predominated all other processes of sedimentation. The sediments of this facies occur in the South-East, East, and West, and are developed in various horizons.

Marine facies:

4) Inshore shallow-water-facies: They are characterized by coarse-clastic limes and oolite-limes with organogenic detritus. The respective zone was in the breaking strip. Here the fauna residues were destroyed which originated from the inhabitants of the adjacent inner parts of the water. Oolites were formed due to an immediate precipitation of CaCO<sub>3</sub> from sea water. In a greater distance from the breaker zone a richer and more varied fauna occurred: Brachiopods, Crinoides, sea-urchins, ostracodes, foraminifers etc. Bottom configurations standing out in relief, in a depth of about 50 metres, were covered with green siphonous-algae.

Card 3/5

On the Conditions of Formation of the Lime-Dolomite  
Mass ( $P_1^0$ ) of the Bakhmut-Depression

20-4-39/52

Biomorph limes arose from this flora and fauna. The inshore facies occurs in the South-West and in the East of the Bakhmut-depression and is combined with stratigraphic horizons, e.g. and b.

5) The facies of the Shel'f-part distanced from the shore, is characterized by micro-grained limes. There exist shraggs of organic substance, little lumps of iron-oxyhydrogen, and small quantities of microscopic residues of brachiopods, ostracodes, etc. This area of sedimentation was apparently also the deepest one. The respective rocks are found near the village Pokrovskoye in the upper lime-layer.

There are 1 table, and 6 references, all of which are Slavic.

Card 4/5

On the Conditions of Formation of the Lime-Dolomite  
Mass ( $P_1^0$ ) of the Bakhmut-Depression

20-4-39/52

ASSOCIATION: Mining Institute Kharkov (Khar'kovskiy gornyy institut)

PRESENTED: April 4, 1957, by N. M. Strakhov, Academician

SUBMITTED: December 19, 1956

AVAILABLE: Library of Congress

Card 5/5

< KAPLAN, B.Ya, Cand Geol-Min Sci--(diss) "Lithology of  
carbonate <sup>rocks</sup> of the limestone-dolomite stratum of the Balzh-  
mut hollow of the Donets basin." Khar'kov, 1958. 21 pp (Min of  
Higher Education UkrSSR. Khar'kov Order of Labor Red Banner State U  
in A.M. Gor'kiy), 130 copies (ML,22-58,104)

-44-

KAPLAN, B.Ya.

Lithological characteristics of the Bakhmut limestone-dolomite  
strata in the Donets Basin. Nauch. trudy KHGI no.6:79-89 '58.  
(MIRA 14:4)

(Donets Basin—Rocks, Sedimentary)

KAPLAN, Boris Yakovlevich.

[Procurement and commercial handling of eggs and poultry; practical directions] Zagotovka i promyshlennaya pererabotka iaits i ptitsy; prakticheskoe posobie. Moskva, TSentrosolusa, 1957. 311 p.

(MIRA 10:12)

(Eggs)

(Poultry)

KAPLAN, D. A.

KAPLAN, D. A. "Syndromes of traumatic injuries of the peripheral nerves of the extremities",  
In the collection: Boyevaya travma nervnoy sistemy, Khar'kov, 1948, p. 195-240.

SO: U-3261, 10 April 53 (Letopis - Zhurnal 'nyk Statey No. 11, 1949)

KAPLAN, D. A.

KAPLAN, D. A. "On the clinical pathogenesis of Volkmann's contraction in the lower extremities". In the collection: *Bolevaya travma nervnoy sistemy*, Khar'kov, 1948, p. 246-59.

SO: U-3261, 10 April 53 (Letopis - Zhurnal 'nykh Statey NO. 11, 1949)



KAPLAN, D. A.

25985. Kaplan, D. A. Solnechnyy i teplovoy udar.—v opl: Kaplan A. D. Fel'dsher  
i akusherka, 1949, No 7, s. 43-46

SO: Knishnaya Letopis', Vol. 1, 1955

KAPLAN, D. A.

57-2-26/32

AUTHORS: Zingerman, A. S. , Kaplan, D. A.

TITLE: The Dependence of the Electric Erosion of the Anode on the Distance Between the Electrodes (Zavisimost' elektricheskoy erozii anoda ot rasstoyaniya mezhdu elektrodami)

PERIODICAL: Zhurnal Tekhnicheskoy Fiziki, 1959, Vol. 28, Nr 2, pp.307-393 (USSR)

ABSTRACT: The tests performed here were conducted in the apparatus described in reference 2. Based on them the following was determined: 1) An increase in the distance between the electrodes causes: a) an increase in the energy developed in the discharge between the aluminum-, copper- and steel-electrodes; the increase in energy becomes observable in distances of more than 75 - 100  $\mu$ ; b) an increase in the cavity-diameter in aluminum, copper and steel. 2.) An increase in the distance between the electrodes up to 75 - 100  $\mu$  does not cause a change in the cavity depth in aluminum, copper, steel and brass. Upon further increase in this distance the cavity depth very

Card 1/3

57-2-26/32

The Dependence of the Electric Erosion of the Anode on the Distance Between the Electrodes

highly decreases in all above-mentioned metals. 3.) The cavity volume in aluminum, copper and steel increase with an increase in the interelectrode-distance to a certain maximum value which is attained at a distance of 100 - 250  $\mu$ . At a greater distance the cavity volume begins to decrease. 4.) The cavity volume in soft metals is smaller than that in fused metals. With an increase in the interelectrode-distance the volume of the condensed metal which is transferred from the opposite electrode also increases. 5.) The energy liberated in the discharge-channel between the brass-electrodes does not change at an interelectrode-distance of below 100  $\mu$ , where the cavity depth does not change either. 6.) A decrease in the cavity depth and its volume at an interelectrode-distance of more than 100  $\mu$  may be explained by the loss of energy in the discharge-channel. 7.) The loss of energy in the discharge-channel at a length of the channel of below 100  $\mu$  is not high and amounts to 1 - 11 %. At a greater distance the losses of energy rapidly increase and at a distance between steel-electrodes of 500  $\mu$  the energy transferred by the electrodes can be evaluated with 25 - 35 % of the full pulse-energy. 8.) At an interelectrode-distance of below 100  $\mu$  the structure of the dis-

Card 2/3

57-2-26/32

The Dependence of the Electric Erosion of the Anode on the Distance Between the Electrodes

charge-channel is apparently little dependent on the length of the channel. At a greater distance the structure of the channel, like the phenomena taking place in it, changes to a considerable extent. There are 9 figures, 1 table, 7 references, 5 of which are Slavic.

SUBMITTED: May 16, 1957

AVAILABLE: Library of Congress

1. Anodes-Erosion
2. Anodes-Cavitation
3. Anodes-Test methods
4. Anodes-Test results

Card 3/3

AUTHORS: Zingerman, A. S., Kaplan, D. A. 57-28-6-22/34

TITLE: On Fluctuations in a Discharge Channel (O fluktuatsiyakh v razryadnom kanale)

PERIODICAL: Zhurnal Tekhnicheskoy Fiziki, 1958, Vol. 28, Nr 6, pp. 1267 - 1274 (USSR)

ABSTRACT: The presence of jags on the voltage oscillogram and a lack of jags on the current oscillograms indicates a sudden change of resistance in the discharge channel. As the jags are irregular and of different height, the change of voltage has the character of a fluctuation. Elementary phenomena causing breakdowns over long gaps become insignificant in breakdown processes taking place over very short gaps. The basic condition of breakdown is the non-stable development of the process, which requires an ever-increasing reduction of the initial electrons (Reference 4 and 5). Ordinary secondary processes cannot warrant an effective reduction of initial electrons. Therefore the character of primary as well as of secondary processes must differ in the case of very short gaps. What has been said about breakdown - the initial stage of electric discharge - is true

Card 1/3

On Fluctuations in a Discharge Channel

57-28-6-22/34

also for the arc itself. The suggested mechanism of a very short arc has been experimentally confirmed. The process of cold emission is of a statistical nature. The statistical character is even more stressed by the influence exercised by positive ions. Thus, the arc mechanism suggested by Germer and Haworth is statistic. This form of statistics manifests itself in the shape of a considerable fluctuation of voltage. According to the arc mechanism the fluctuation is caused by the processes on the cathode, which fact was confirmed experimentally. As the work function depends more or less on the cathode material and on the nonconductive film on its surface, fluctuation must also depend on the material of the cathode. In the case of strong currents the section of the channel changes. If emission from a part of the cathode decreases, it increases in another part, and the average state of the discharge channel is subjected to slight deviations. This causes the voltage curve to be balanced. There are 10 figures and 19 references, 6 of which are Soviet.

Card 2/3

On Fluctuations in a Discharge Channel

57-28-6-22/34

ASSOCIATION: Leningradskiy institut kinoinzhenerov (Leningrad Institute  
of Cinematographical Engineers)

SUBMITTED: July 1, 1957

1. Electric discharges—Theory 2. Electric discharges—  
Statistical analysis 3. Cathodes—Properties 4. Work  
functions

Card 3/3

*KAPLAN, D.A.*

AUTHORS: Zingerman, A.S. and Kaplan, D.A.

121-4-5/32

TITLE: Investigation of the Power Supply for Electric Spark  
Machines (Issledovaniye ustoychnika pitaniya elektroiskrovnykh  
stankov)

PERIODICAL: Stanki i Instrument, 1958,<sup>29</sup> No.4, pp. 14 - 15 (USSR).

ABSTRACT: Oscillographic records were taken in examining the operation of the impulse generator of the resistance-capacitance type feeding an JK3-18 electric spark machine. 12 mm diameter brass electrodes were used with paraffin as the liquid medium. The discharge current and voltage between electrodes were recorded at different values of the capacitance between 1.5 and 210 microfarads. The values of the current peak, the duration of the impulse and the energy discharged during the first half-wave are stated in the table and plotted in the graph. The study revealed a large scatter of the voltage and the energy discharge caused by a premature breakdown of the electrode gap. The actual working process (duration of impulse) takes only 10% of the total time (100  $\mu$ sec. in a 1 millisecc. cycle). The reasons for the scatter are a low de-ionisation rate, the presence of erosion products in the gap and the formation of inter-electrode bridges. A simple partial remedy is filtration of the liquid. There are 2 figures, 1 table and 3 Russian references.

AVAILABLE: Library of Congress  
Card 1/1 1. Impulse generators-Power supply



KUCHINSKIY, G.S., dots.; KAPLAN, D.A., inzh.; TIKHANOVA, O.V., inzh.

Ionisation characteristics of the oil-impregnated paper  
insulation. Izv.vys.ucheb.zav.; energ. 2 no.8:39-45  
Ag '59. (MIRA 13:2)

1. Leningradskiy politekhnicheskiy institut imeni M.I.Kalinina.  
Predstavlena kafedroy tekhniki vysokikh napryazheniy.  
(Electric insulators and insulation)

88058

26.2311

24,2120 (1049, 1160, 1482)

S/139/60/000/006/027/032  
E032/E414

AUTHORS Zingerman, A.S. and Kaplan, D.A.

TITLE Discharge Voltage of a Short Pulsed Arc

PERIODICAL Izvestiya vysshikh uchebnykh zavedeniy, Fizika,  
1960, No 6, pp.165-166

TEXT The aim of the present work was to investigate the effect of electrode material and the medium between the electrodes on the magnitude of the discharge voltage. The apparatus used in these experiments and the method employed were described by A.S.Zingerman in Ref.1. All the experiments were carried out with 320  $\mu$ F capacitors and a voltage of 1000 V. One of the electrodes was in the form of a plate (45 x 35 x 1.5 mm) and the other in the form of a rod having a diameter of 3 to 4 mm. One end of the rod was hemispherical. The electrodes were polished to "Class 13 purity". A constant gap of 8  $\mu$  was maintained between the electrodes. Two groups of experiments were carried out. In the first group, the effect of the medium was investigated. In these experiments brass or steel electrodes

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EO32/E414

# Discharge Voltage of a Short Pulsed Arc

were employed and the plane electrode was always at a positive potential. In the second group of experiments a study was made of the effect of the material of the electrodes. In these experiments ordinary solar oil was used as the medium between the electrodes. Four series of experiments were carried out in this group. In the first two of these the plane electrode was made of brass and was kept positive in the first series and negative in the second. In the third and fourth series of experiments the plane electrode was made of steel and was also either at a positive or a negative potential. In these experiments the rod electrode was of various materials, namely steel, aluminium, copper, brass or molybdenum. Only the voltage oscillograms were taken since it was established earlier that neither the material of the electrodes nor the medium between them have any effect on the form of the current curve or its amplitude. The current oscillogram had the following form. The current rose to a maximum of 1920 amps in 300  $\mu$ sec and its value was 7% of the amplitude value in 300  $\mu$ sec. The voltage oscillograms obtained

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E032/E414

#### Discharge Voltage of a Short Pulsed Arc

with brass electrodes and water, castor oil, glycerine, transformer oil, liquid glass, water solution of borax and boric acid, kerosene and air as the media did not differ from each other either in form or in magnitude. The same result was obtained with steel electrodes and the above media. Thus the magnitude of the discharge voltage and the energy dissipated in the discharge channel are independent of the nature of the medium in which the discharge takes place. With given anode material, it was found that the form and the magnitude of the discharge voltage are strongly dependent on the cathode material. Thus, for example, with a steel cathode the voltage is 1.5 to 1.8 times greater than that with a brass cathode. With given cathode material, the oscillograms are not very different from each other whatever the anode material. The general conclusion is, therefore, that the discharge voltage of a short pulsed arc is very dependent on the cathode material and to a much lesser extent on the anode material. The medium between the electrodes has no effect on the form and magnitude of the

Card 3/4

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S/139/60/000/006/027/032  
E032/E414

**Discharge Voltage of a Short Pulsed Arc**

discharge voltage and this suggests that the discharge takes place in the vapours of the electrode materials, and mostly in the vapour of the cathode material. There are 2 figures and 1 Soviet reference.

ASSOCIATION: Leningradskiy institut kinoinzhenerov  
(Leningrad Institute of Motion Picture Engineering) X

SUBMITTED: October 21, 1959

Card 4/4

KUCHINSKIY, G.S., kand.tekhn.nauk; KAPLAN, D.A., inzh.

Discharge along the layers of paper and oil insulation at  
constant voltage. Vest.elektroprom. 31 no.6:50-52 Je '60.  
(MIRA 13:7)

(Electric insulators and insulation)  
(Electric transformers)

KUCHINSKIY, G.S., kand.tekhn.nauk, dotsent; KAPLAN, D.A., inzh.

Permissible electric field intensities in oil-saturated paper insulation of apparatus used in d.c. power transmission systems.  
Elektrichestvo no.5:64-68 My '61. (MIRA 14:9)

1. Leningradskiy politekhnicheskii institut imeni Kalinina.  
(Electric fields)  
(Electric insulators and insulation)

KAPLAN, D.A., inzh.

Boundary effect in condenser-type insulation. Izv.vys.ucheb.zav.;  
energ. 4 no.4:30-36 Ap '61. (MIRA 14:5)

1. Leningradskiy politekhnicheskii institut imeni M.I.Kalinina.  
(Electric insulators and insulation) (Electric capacitors)



KAPLAN, D.A., inzh.; KUCHINSKIY, G.S., kand.tekhn.nauk, dotsent

Physical nature of the ionization processes in oil saturated paper insulation. Izv. vys. shkol. sav.; energ. 5 no.3:28-33 Mr '62.  
(MIRA 15:4)

1. Leningradskiy politekhnicheskoy institut imeni M.I.Kalinina.  
Predstavlena kafedroy tekhniki vysokikh napryazheniy.  
(Electric insulators and insulation)

ZINGERMAN, A.S., inzh.; ~~KAPLAN~~, D.A., inzh.

Concerning the article "Balance of energy in a spark gap with a  
low-voltage impulse discharge in a liquid dielectric medium."  
Vest.elektroprom. 33 no.12:61-64 D '62. (MIRA 15:12)  
(Electric discharges)

KUCHINSKIY, G.S., kand. tekhn. nauk, dotsent; KAPLAN, D.A., inzh.

Features of insulation reduction with consideration of the  
operating voltage. Elektrichestvo no.8:21-25 Ag '63.  
(MIRA 16:10)

1. Leningradskiy politekhnicheskoy institut imeni Kalinina.

GREYSUKH, M.A., inzh.; KAPLAN, D.A., kand.tekhn.nauk; KUCHANSKIY, G.S.,  
kand.tekhn.nauk; WESSERMAN, G.T., kand.tekhn.nauk

Impulse strength of oil-saturated paper insulation of apparatus.  
Elektrotehnika 35 no.4:33-35 Ap '64. (MIRA 17:4)

KAPLAN, D.A., kandi. tekhn. nauk; MOSCHINSKY, G. I., kandi. tekhn. nauk

Effect of moisture on the electrical strength of transformer  
oil. Elektrotehnika 35 no.5:30-33 May'64 (MIRA 17:3)

KAPLAN, D.A., kand. tekhn. nauk

Electrical strength of transformer oil at small electrode gaps.  
Elektrotehnika 35 no.10:17-18 0 '64.

(MIRA 17:11)

EYDLIN, I.Ya.; KAPLAN, D.A.

Newsprint score cutter. Bumagodel. mash. no.8:119-129 '60.

(MIRA 14:3)

(Papermaking machinery)

KAPLAN, D.A.

Calender roll with a pneumatic device for holding cartridges.  
Bumagodel. mash. no.8:130-132 '60. (MIRA 14:3)  
(Papermaking machinery)



NIKHAMKIN, E.A.; EYDLIN, I.Ya.; KAPLAN, D.A.

Study of the basic factors determining the closeness of rewinding  
on a winder. Bumagodel.mash. no.9:173-183 '61. (MIRA 15:1)  
(Papermaking machinery)

GURVICH, Yu.V.; KAPLAN, D.A.; KATSNEL'SON, G.N.; NIKHAMKIN, E.A.

Effect of basic parameters on the production capacity of a slitter.  
Bumagodel.mash. no.9:155-172 '61. (MIRA 15:1)  
(Papermaking machinery)

GURVICH, Yu.V.; KAPLAN, D.A.; KATSNEL'SON, G.N.

Analysis of the productivity of slitters. *Bum.prom.* 36 no.2:22-  
24 F '61. (MIRA 14:2)

1. Tsentral'nyy nauchno-issledovatel'skiy institut po proyektirovaniyu ~~bumagodelatel'nykh~~ mashin.  
(Papermaking machinery)

GREYSUKH, Moisey Ayzikovich; KUCHINSKIY, Georgiy Stanislavovich;  
KAPLAN, Daniyel' Aronovich; MESSERMAN, Girsha Tevelevich;  
KAZARNOVSKIY, D.M., red.; SOBOLEVA, Ye.M., tekhn. red.

[Oil-saturated paper insulation in high-voltage systems]  
Bumazhno-maslianaia izoliatsiia v vysokovol'tnykh kon-  
struktsiakh. [By] M.A.Greisukh i dr. Moskva, Gosenergo-  
izdat, 1963. 298 p. (MIRA 17:1)

EPSHTEYN, TS.A.; KAPLAN, D.A.; RUTSHEYN, P.V.; TOROPOVA, M.N.

Diagnosis and treatment of multiple sclerosis. Vest. AMN SSSR 16  
no.6:53-57 '61. (MIA 15:1)

1. TSentral'naya psikhonevrologicheskaya i neyrokhirurgicheskaya  
bol'nitsa Ministerstva putey soobshcheniya.  
(MULTIPLE SCLEROSIS) (ENCEPHALOMYELITIS)

KAPLAN, D.A.; EPSHTEYN, TS.A.; KUTSHEYN, P.V.; TOROPOVA, M.N.

Viral etiology of multiple sclerosis. Zhur. nevr. i psikh.  
64 no.3:368-369 '64. (MIRA 17:5)

1. Tsentral'naya klinicheskaya psikhonevrologicheskaya i  
neyrokhirurgicheskaya bol'nitsa (nachal'nik V.M. Yushtin)  
Ministerstva putey soobshcheniya, Khar'kov.

5<sup>1</sup>

1 Manufacture of insulating building material from flax scutch. E. P. Derbentsan, N. A. Derbentsaya, D. M. Kaplan, and L. J. Vladyka. *Vsesi Akad. Navuk Belarus. S.S.S.R.* 1952, No. 1, 55-60 (in White Russian).—A fiber-free flax scutch contains (on dry basis) ash 1.53, alc.- and  $\text{CaH}_2$ -extractable substances 1.97, pentosans 18.42, hexosans 3.50, 2%  $\text{HCl}$ -sol. nonhydrolyzable carbohydrates (mostly cellulose) 48.73, lignin 24.20, and proteins, pigments, and other nonreducing substances 2.59%. For the manuf. of insulating plates, the scutch was ground and chemically treated, giving a material contg. (on dry basis) ash 4.0,  $\text{Et}_2\text{O}$ - and  $\text{CaH}_2$ -sol. substances 5.8, water-sol. substances 1.3, cellulose 69.0, pentosans 15.0, and lignin 16.0%, resp. The plates possess a low water- and moisture-absorbing capacity and readily release absorbed moisture on drying.

E. Wierbacki

EXCERPTA MEDICA Sec 7 Vol 13/o Pediatrics Sent 50

2396. TREATMENT OF WHOOPING COUGH-PNEUMONIA WITH ANTIBIOTICS  
(Russian text) - Kaplan E. A. and Vilenchik G. Yu. - ZDRAVOOKHR.  
BELOR. 1958, 4/1 (22-24) Tables 2

The results of the treatment of pneumonias with antibiotics in whooping cough were better when antibiotics were given in accordance with the sensitivity of the bacterial flora of the pharynx. Usually, chloramphenicol and streptomycin were indicated.

Najman - Zagreb (L, 7)



KAPLAN, E.M.

Blood picture in myeloid leukemia in children. *Pediatrics*, Moskva No.5:  
44-49 Sept-Oct 51. (CML 21:4)

1. Professor, Head of the Department of Children's Diseases, Yaroslavl'  
State Medical Institute.

**KAPLAN, E.M., professor**

Some clinical characteristics and late sequelae of hemorrhagic  
diathesis in children. *Pediatrics* 39 no.5:54-60 S-O '56. (MLRA 10:1)  
(HEMORRHAGIC DIATHESIS, in infant and child,  
(Rus))

KAPLAN, E.M.; TARTKOVSKIY, L.B.

Surgical treatment of osteoarticular tuberculosis as revealed by  
data from the Tashkent Antituberculosis Dispensary No. 4. Med.  
zhur. Uzb. no.12:17-21 D '60. (MIRA 14:1)

(BONES—TUBERCULOSIS)

9 (2)

06352  
SOV/142-2-4-5/26

AUTHOR: Kaplan, E.N., Laykhtman, I.B.

TITLE: An Analysis of the Work of an Impedance Measuring Instrument in the Range of Super-High Frequencies

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy, Radiotekhnika, 1959, Vol 2, Nr 4, pp 419-423 (USSR)

ABSTRACT: The work of an impedance measuring instrument for the shf range is analyzed. For this purpose, a method is used which is based on separating the incident and the reflected wave by a special directional coupler - the reflectometer suggested by A.A. Pistol'kors and M.S. Neyman. The authors discuss the principal error sources common to an impedance measuring instrument based on the methods of comparison and synchronous detecting. Some recommendations are given for increasing the accuracy by selecting the proper circuits and operating conditions of the measuring instrument. The method provides lower requirements for the detector characteristics and has an increased sensitivity. The appli-

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06352

SOV/142-2-4-5/26

An Analysis of the Work of an Impedance Measuring Instrument in the Range of Super-High Frequencies

cation of periodic modulation of the phase of the reflected signal will increase the accuracy essentially. Using any type of amplitude modulation will increase the error rating. The publication of this article was recommended by the Department of Theoretical Principles of Radio Engineering of the Kiyevskiy ordena Lenina politekhnicheskoy institut (Kiyev - Order of Lenin - Polytechnic Institute). There are 1 circuit diagram and 1 American reference.

SUBMITTED: December 16, 1958 (June 27, 1958)

Card 2/2

BOVA, N.T.; KAPLAN, E.N.; LAYKHMAN, I.B.

Calculation of a homogeneous line with an arbitrary number of concentrated heterogeneities. Izv. vys. ucheb. zav.; radiotekh. 5 no.3:376-380 My-Je '62. (MIRA 15:9)

1. Rekomendovana kafedroy teoreticheskikh osnov radiotekhniki Kiyevskogo ordena Lenina politekhnicheskogo instituta.  
(Wave guides) (Radio lines) (Microwaves)

GABAY, M.G.; KAPLAN, F.M.

Tuberculous allergic diseases of the eye in tuberculous infants.  
Pediatrics 37 no.8:30-34 Ag '59. (MIRA 13:1)

1. In Detskoy tuberkuleznyy bol'nitsy No.9 Bauman'skogo rayona Moskvy  
(glavnyy vrach Ye.S. Lebedeva).  
(TUBERCULOSIS, PULMONARY, in infancy & childhood)  
(TUBERCULOSIS, OCULAR, in infancy & childhood)

KENE, Francois [Quesnay, Francois] [1694-1774]; KAZARIN, A.I., red.-sostavitel';  
GORBUNOV, A.V. [translator]; KAPLAN, P.R. [translator]; FEYGINA,  
L.A. [translator]; SPERANSKAYA, L., red.; NOGINA, N., tekhn.red.

[Selected works on economics] Izbrannye ekonomicheskie proizve-  
deniya. Moskva, Izd-vo sotsial'no-ekon.lit-ry, 1960. 549 p.

(MIRA 14:3)

(Agriculture--Economic aspects)



KAPLAN, F.S.

Therapy of gastric and duodenal ulcer by intragastric administration of oxygen [with summary in English]. Med.paras. i paras.bol. 27 no.6:723-728 M-D '58. (MIRA 12:2)

1. Is 1-go terapevticheskogo otdeleniya Tsentral'noy klinicheskoy bol'nitsy Ministerstva puty soobshcheniya SSSR (nach. bol'nitsy V.N. Zakharchenko, nauchnyy rukovoditel' otdeleniya prof. A.L. Vilkovskiy).

(HELMINTH INFECTIONS, compl.

peptic ulcer, intragastric oxygen ther. (Rus))

(PEPTIC ULCER, compl.

helminth infect., intragastric oxygen ther. (Rus))

(OXYGEN, ther. use,

helminth infect. with peptic ulcer, intragastric admin. (Rus))

BENESH, I. [Benes, J.]; KAPLAN, G.

Thermal oxidative degradation of -irradiated polypropylene. *Vysokom. soed.* 5 no.10:1580-1584 0 '63.  
(MIRA 17:1)

1. Nauchno-issledovatel'skiy institut vysokomolekulyarnoy khimii, Brno, Chekhoslovatskaya Sotsialisticheskaya Respublika i Voennoy Akademii imeni A. Zapototskogo, Brno, Chekhoslovatskaya Sotsialisticheskaya Respublika.

Z/038/63/000/001/004/005  
D236/D308

AUTHORS: Kaplan, Gustav and Pelčík, Jiří  
TITLE: ~~XXXXXXXXXX~~  
The effect of ionizing radiation on the rheological properties of thickened burdock oil  
PERIODICAL: Jaderná energie, no. 1, 1963, 20-22

TEXT: The article describes the effect of  $\gamma$ -radiation from a  $\text{Co}^{60}$  source and  $\beta$ -radiation from a  $\text{Sr}^{90}$  source on the rheological properties of hydrogenized burdock oil. The authors assumed that the rheological properties will be more sensitive to irradiation than any of the previously described properties. The oil is plastic between 40 and 55°C, and has a pasty consistency. At 60°C it becomes liquid. The oil must conform to the Svedov relation for viscous flow. The apparatus used and the method of irradiation were described in a previous work. The oil was inserted into the microplastometer at 60°C. Measurements were taken between 40° and 55°C for the determination of viscosity, with the Shirley - Ferranti instrument. The results of measurements are given, and non-irradiated oil is com- ✓

Card 1/2

The effect of ionizing radiation ...

Z/038/63/000/001/004/005  
D236/D308

pared with irradiated oil. The authors suggest that the changes of the rheological properties go with changes of the molecular structure or of the intermolecular forces (e.g. van der Waal's forces). The work is being continued in order to find experimental proof for these theories. There are 2 figures and 5 tables. ✓

ASSOCIATION: Vojenská akademie Antonína Zápotockého, Brno (Antonín Zápotocký Military Academy, Brno)

Card 2/2

SAVVATIMOVA, L.N.; KAPLAN, G.A.; LEYTMAN, Yu.S.

Optimum planning of the operations of petroleum refineries. Za  
tekh.prog. 3 no.12:43-45 D '63. (MIRA 17:2)

1. Nauchno-issledovatel'skiy proyektnyy institut "Neftekhimavtomat".

KAPLAN, G.A.

Efficient distribution of and cooperation among enterprises  
constructing industrial buildings in the most important  
objective in planning industrial regions. Proiz.stroi. 38  
no.6:3-6 '60. (MIRA 13:7)  
(Regional planning) (Factories--Location)

KAPLAN, G.A.

Distribute industrial plants according to the technical and  
economic characteristics of production. Prom. stroi. 38

no. 12:5-8 '60.

(MIRA 13:12)

(Industries, Location of)

ABRAMOVICH, A.D., kand. tekhn. nauk; ANTONOV, M.F., kand. tekhn. nauk; KAPLAN, G.A., inzh.-ekonomist; LEVIN, S.M., inzh.-zemleustroitel'; LISTENKOV, F.M., kand. geogr. nauk; SAMOYLOV, Ya.M., kand. tekhn. nauk; SMOLYAR, I.M., kand. arkhtek.; SOLOFNIENKO, N.A., kand. arkht.; STERLIGOV, V.D., kand. arkht.; FALEYEV, V.G., inzh.; Prinimali uchastiye: BUTUZOVA, V.P.; GLABINA, N.K.; GOL'DSHTEYN, A.M.; DEMYANOVSKIY, V.S.; KAPLAN, G.L.; FEDOTOVA, N.A.; TSEYTLIN, G.I.; BURLAKOV, N.Ya., red.; KOMPANEYETS, Z.N., red. izd-va; GOLOVKINA, A.A., tekhn. red.

[Regional planning of economic administrative regions, industrial regions and centers; planning guide] Raionnaya planirovka ekonomicheskikh administrativnykh raionov, promyshlennykh raionov i uzlov; rukovodstvo po proektirovaniyu. Pod red. N.IA. Burlakova. Moskva, Gosstroizdat, 1962. 266 p. (MIRA 15:10)

1. Akademiya stroitel'stva i arkhitektury SSSR. Institut gradostroitel'stva i raionnoi planirovki. 2. Zamestitel' direktora po nauchnoy rabote Nauchno-issledovatel'skogo instituta gradostroitel'stva i rayonnoy planirovki (for Burlakov). 3. Nauchno-issledovatel'skiy institut gradostroitel'stva i rayonnoy planirovki (for Butuzova, Glabina, Gol'dshteyn, Demyanovskiy, Kaplan, Fedotova, Tseytlin). (Regional planning)



IBRAGIMOV, I.E.; KOPYSITSKIY, T.I.; KAPLAN, G.A.; MARBIN, Z.S.

Use of a mathematical model in determining the parameters of a circulation multiplicity regulator for a system of automatic control of catalytic cracking. Izv. AN Azerb. SSR. Ser. fiz.-mat. i tekhn. nauk no.6:101-112 '62. (MIRA 16:6)  
(Cracking process) (Automatic control) (Mathematical models)

ABDULLAYEV, A.A.; KAPLAN, G.A.; MAL'TSEV, V.I.; SHLYAKHOVSKIY, I.D.

Using mathematical methods to determine the optimal blending formula for aircraft gasolines. Khim. i tekhn. topl. i masel 9 no.12:51-56 D '64. (MIRA 18:2)

1. Nauchno-issledovatel'skiy i proyektnyy institut po kompleksnoy avtomatizatsii proizvodstvennykh protsessov v neftyanoy i khimicheskoy promyshlennosti i GK PTK.

SOBOLEV, Aleksey Semenovich; KAPLAN, G.D. [deceased], red.; BYKOVA,  
M.G., red.; DEYEVA, V.M., tekhn. red.

[Practical manual in agricultural entomology] Praktikum po sel'-  
skokhoziaistvennoi entomologii. Moskva, Gos. izd-vo sel'khoz.  
lit-ry zhurnalov i plakatov, 1961. 325 p. (MIRA 14:8)  
(Entomology)

KIPERMAN, S.L.; KAPLAN, G.I.

Kinetics of hydrogenation in a gradientless system. Kin. i kat.  
5 no.5:888-897 S-O '64. (MIRA 17:12)

1. Institut organicheskoy khimii imeni Zelinskogo AN SSSR.

ABRAMOVICH, A.D., kand. tekhn. nauk; ANTONOV, M.F., kand. tekhn. nauk; KAPLAN, G.A., inzh.-ekonomist; LEVIN, S.M., inzh.-zemleustroitel'; LISTENKOV, F.M., kand. geogr. nauk; SAMOYLOV, Ya.M., kand. tekhn. nauk; SMOLYAR, I.M., kand. arkhtek.; SOLOFNINKO, N.A., kand. arkht.; STERLICOV, V.D., kand. arkht.; FALEYEV, V.G., inzh.; Prinimali uchastiye: BUTUZOVA, V.P.; GLABINA, N.K.; GOL'DSHEYN, A.M.; DEMYANOVSKIY, V.S.; KAPLAN, G.L.; FEDOTOVA, N.A.; TSEYTLIN, G.I.; BURLAKOV, N.Ya., red.; KOMPANEYETS, Z.N., red. izd-va; GOLOVKINA, A.A., tekhn. red.

[Regional planning of economic administrative regions, industrial regions and centers; planning guide] Raionnaya planirovka ekonomicheskikh administrativnykh raionov, promyshlennykh raionov i uzlov; rukovodstvo po proektirovaniyu. Pod red. N.I.A. Burlakova. Moskva, Gosstroizdat, 1962. 266 p. (MIRA 15:10)

1. Akademiya stroitel'stva i arkhitektury SSSR. Institut gradostroitel'stva i raionnoi planirovki. 2. Zamestitel' direktora po nauchnoy rabote Nauchno-issledovatel'skogo instituta gradostroitel'stva i rayonnoy planirovki (for Burlakov).
  3. Nauchno-issledovatel'skiy institut gradostroitel'stva i rayonnoy planirovki (for Butuzova, Glabina, Gol'dshteyn, Demyanovskiy, Kaplan, Fedotova, Tseytlin).
- (Regional planning)

PHASE I BOOK EXPLOITATION

597

Kaplan, Grigoriy Markusovich

Gidravlika zavoyevayet stanki (Hydraulics Conquer Machine Tools)  
Moscow, Profizdat, 1957. 84 p. (Rabochemu - o novoy tekhnike)  
3,000 copies printed.

Ed.: Shlepina, M.M.; Tech. Ed.: Golichenkova, A.A.

PURPOSE: This booklet acquaints the general reader with the extent of hydromechanization of machine tools.

COVERAGE: The booklet briefly describes the variety of parts machined on lathes, difficulties encountered in the chip control, inadequate utilization of Soviet machine tool capacities, the low level of mechanization of auxiliary operations, extent of automation of machine tool operations, introduction of hydraulically operated jigs and fixtures, etc. There are no references. No personalities are mentioned.

~~Card 1/4~~

KAPLAN, G.M., inzh.

~~\_\_\_\_\_~~  
The US1 hydraulic copying support. Vest. mash. 37 no.8:61-64 Ag '57.  
(lathes--Attachments) (MIRA 10:9)

25(2)

PHASE I BOOK EXPLOITATION

SOV/1744

Kaplan, Grigoriy Markusovich

Kak sozdayutsya novyye stanki (How New Machine Tools Are Designed)  
[Moscow] Izd-vo VTsSPS Profizdat, 1958. 122 p. (Series: Rabo-  
chemuo novoy tekhnike) 5,000 copies printed.

Ed.: M.M. Shlepina; Tech. Ed.: S.I. Rakov.

**PURPOSE:** This booklet on the tasks confronting Soviet machine-tool makers during the 1959-65 period is intended for the general reader.

**COVERAGE:** This booklet discusses the development of production of modern machine tools and the creation of new and progressive designs. Techniques employed in designing universal machine tools and the machinery necessary for their production are described. Data on unit machine tools, transfer machines, programmed machine tools, automatized shops, and plants are given. No personalities are mentioned. There are no references.

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ASACSLA METALLURGICAL LITERATURE CLASSIFICATION

1934 1935 1936 1937 1938 1939 1940 1941 1942 1943 1944 1945 1946 1947 1948 1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959 1960 1961 1962 1963 1964 1965 1966 1967 1968 1969 1970 1971 1972 1973 1974 1975 1976 1977 1978 1979 1980 1981 1982 1983 1984 1985 1986 1987 1988 1989 1990 1991 1992 1993 1994 1995 1996 1997 1998 1999 2000

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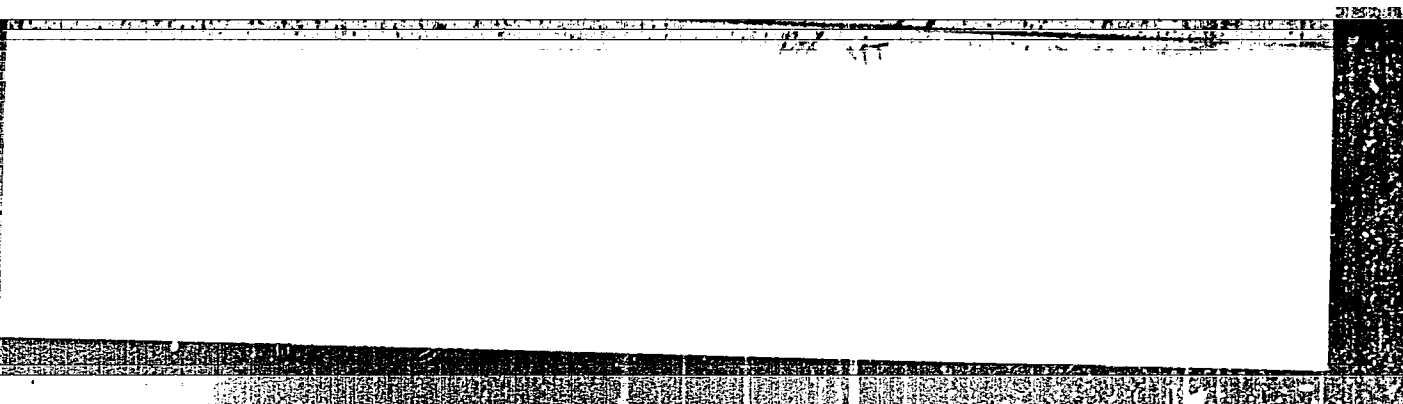
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**AUTHOR**  
**TITLE**

MEYERSON, T.A., KAPLAN, G.Ye., USPENSKAYA, T.A. 09-9-15/32  
Improvement of the Alkali Decomposition Process of  
Monazite.  
(Usovershenstvovanie protsessy shchelochnogo razlozheniya  
monatsita)

**PERIODICAL**

Atomnaya Energiya, 1957, Vol. 3, Nr 9, pp 259-260 (USSR)

**ABSTRACT**

The initial material, a monazite concentration, had a granulation of 1-5 mm. As a decomposing medium NaOH (50 g/l) was used at a temperature of 130°C. First, the concentration was treated in a heatable ball mill (1,5 l cubic capacity, diameter 0,8 cm, weight 1,5 kg), which was mounted in a lift thermostat. Experimentally 4 hours duration was found to be the optimum. It was further proved by experiment that the decomposition of the concentrate (> 99,5 %) is best if the consumption of NaOH is 150 - 200 % of the weight of the initial concentrate. For a further reduction of the consumption of NaOH a further two-step treatment was used. During the first step 75 % of the weight of the initial material was used as NaOH weight. The not soluble remains of this step were collected (from 10 fillings) and were

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89-9-15/32  
Improvement of the Alkali Decomposition Process of  
Monazite.

anew treated with 150 % of the weight of the remainder  
of the NaOH weight in the ball mill. The NaOH of the  
second step was used again for the next first step.  
(With 1 Table, 1 Illustration and 5 Slavic references)

ASSOCIATION not given.  
PRESENTED BY: -  
SUBMITTED: 10.VI. 1957  
AVAILABLE: Library of Congress.

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(Beryllium--Metallurgy)

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"Investigation of Alkaline Methods of Treating Monazite and Zircon."

paper to be presented at the 2nd UN Intl Conf. on the peaceful uses of Atomic  
Energy, Geneva, 1 - 13 Sep 58.